Pinehurst Bridge
Beach Drive 0.75 mile south of Sherill Drive,
spanning Pinehurst Branch Creek, NW
Rock Creek Park
Washington
District of Columbia

HAER No. DC-15

HAER DC, WASH, 568-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service Department of the Interior Washington, DC 20013-7127

HAER DC, WASH, 568-

## HISTORIC AMERICAN ENGINEERING RECORD

## PINHEHURST BRIDGE

HAER No. DC-15

Location:

Beach Drive 0.75 mile south of Sherrill Drive spanning

Pinehurst Branch, Rock Creek Park, Washington D.C.

18/322321/4315375 Quad: Washington West

Date of Construction:

1910-1911; widened 1958

Engineer:

T.C.J. Baily

Contractor:

E.G. Gummel

Present Owner:

Rock Creek Park

National Capital Region National Park Service Department of the Interior

Present Use:

Vehicular bridge

Significance:

Pinehurst bridge is one of the early twentieth century bridges built in Rock Creek Park. Constructed in 1910, the bridge is a reinforced concrete arch structure with stone facing. This rustic bridge was built as part of the plan to provide more enjoyable and scenic travelling routes for the citizens of Washington. The structure was widened in 1958 and the east side's design, although constructed approximately fifty years later, was similar to the original west side. Thus, this side compliments the original structure while showing the more modern materials and the evolution of this type of masonry-faced concrete park bridge.

Historian:

Marcia M. Miller, 1988

After many years of proposals, Rock Creek Park was created by an Act passed by Congress on September 27, 1890. Containing appropriations for the purchase of 1605.9 acres of land running along Rock Creek from the Maryland border to the Zoological Park to be preserved as a natural park, the act defined the purpose of the park as providing "for the preservation from injury or spoliation of all timber, animals, or curiosities within said park, and their retention in their natural condition as nearly as possible." At the time, the United States government had designated only two other such areas as natural parks. The Commissioners of the District of Columbia and Chief of Engineers of the United States Army jointly controlled the park (although at this time the military exercised more authority). Their duty was to lay out paths and roads for public use. After purchasing the land, however, Congress did not fund any improvements to the park for the next seven years.

Since Congress did not appropriate money for work within the park, chain gangs (comprised of District prisoners) constructed the improvements to paths and roads. In 1898, Congress finally approved money to create a road running the length of the park. Beach Drive followed the natural course of the path along the creek. This became, and remains today, the main thoroughfare through the park. Although the road crossed the creek in many places, only four permanent bridges were constructed between 1898 and 1900. Fords provided crossings at other locations, but the Board of Control of Rock Creek Park realized the necessity of building more bridges along Beach Drive.

In the early years of the twentieth century, several scenic bridges could be found along the lower end of Beach Drive. The northern section of the drive, however, was slow to develop. Around 1910, the Board of Control of Rock Creek Park planned to extend Beach Drive and build several other roads in the northern section to create better access into the park. At this time, Beach Drive, north of Milkhouse Ford, was still a dirt road although the city planned to macadamize the road. There was originally an old wooden bridge located on this spot, however, it was not suitable for the increased traffic. The City Engineers, as part of the plan, designed three new bridges to be built. These three bridges, along with subsequent road improvements were considered very important improvements to Rock Creek Park as they opened up

<sup>&</sup>lt;sup>1</sup>Mackintosh, Barry. <u>Rock Creek Park An Administrative History</u>. History Division, National Park Service, Department of the Interior, Washington, D.C. 1985. p. 17.

<sup>&</sup>lt;sup>2</sup>ibid. Yellowstone and Sequoia National Parks were the first two parks to be designated as such.

 $<sup>^3</sup>$ Beach Drive is named in honor of Col. Lansing H. Beach, Army Corps of Engineers, U.S. Army who served as Secretary of the Board of Control of Rock Creek Park and later as the Bridge Commissioner for the District of Columbia. He is responsible for the early improvements to Rock Creek Park.

new routes for the adventuresome Washingtonians. In 1910, the District Bridge Engineer requested proposals for a stone and concrete arch bridge to be built above the upper ford on Beach Drive.

The contract for the bridge was awarded to E. G. Gummel for the sum of \$996.00.5 It would be built by hired labor with two months allotted for completion. The bridge is twenty-five feet long, including a sixteen foot arch span. With both approaches the bridge has an overall length of forty-one feet. The span length equals sixteen feet to make the total length of the bridge forty-one feet. The original width of the bridge was twenty-four feet. Local materials were used whenever possible. The broken stone used as the rubble finish was gathered alongside Beach Drive near the northern entrance of the park. It was uncoursed rubble masonry of good quality laid in one to two inches of cement mortar. The contract specifications stated that it could be no less than six inches in thickness and twelve inches horizontally (unless otherwise directed). The sand used in the cement was taken from the bed of Rock Creek at Milkhouse Ford. The arch ring stones would be old blue stone curb set in the arch. They were one foot six inches to two feet three inches long parallel to the axis. The remainder of the arch was concrete. The falsework was made of tongue and groove, dressed Virginia pine and given a coating of linseed oil before the concreting. The construction of the parapets. the fill between the sidewalls and the construction of the roadway were not included in the contract.

In 1958, Beach Drive underwent extensive reconstruction. Pinehurst Bridge was widened at this time. The angle of the new roadway is slightly more pronounced, the widened bridge is not a uniform width (as can be seen when looking at the east wall). At this time, the original parapet stones were removed from both walls and the roadway raised approximately three feet. Railings were also added. The widened section is a corrugated steel multi-

<sup>4&</sup>quot;New Bridges and Roads in Rock Creek Park." The Washington Evening Star, Washington, D.C., 14 August 1911, part 2.

 $<sup>^{5}</sup>$ Correspondence, Maintenance file of the National Capital Region Park Authority.

<sup>&</sup>lt;sup>6</sup>Office of Engineer Commissioner, Washington, D.C. <u>Bridge on Beach Driveway</u> North of <u>Military Road</u>. 1910, sheet 6.

<sup>7</sup>ibid., sheet 7

<sup>&</sup>lt;sup>8</sup>ibid.

<sup>&</sup>lt;sup>9</sup>ibid., sheet 5.

<sup>10&</sup>lt;sub>footnote</sub>

plate arch with a concrete collar around the arc and at the footings. 11 The entire east side of the bridge is faced with different stone. This facing is smoother, more regularly cut and more neatly pointed. The specifications, however, did state that the masonry must blend in with the existing masonry. 12 Underneath the arch, the original voussoir stones can still be seen.

Pinehurst Bridge was built to accommodate the increased traffic flow in the northern section of the park. It was part of the plan to improve this area to provide more enjoyable scenic routes for both the citizens of Washington and its many visitors. As such, much importance was placed on the appearance of the bridge. It was considered important for any structures located within the park to blend with the scenery rather than stand out as something man-made. Built at the same time as several other bridges, it uses a rubble facing to harmonize with the natural surroundings of the park. Rustig architecture in the National Park Service had reached its peak around 1910. 13 The older portion of Pinehurst Bridge exemplifies the typical rustic bridge found in Rock Creek Park in the early twentieth century. As one of the few early bridges still standing in the Park, Pinehurst Bridge maintains the emphasis placed on aesthetics during the time of its construction. Although the bridge was widened in 1958, the original structure is still intact (except for the arch stone of the east side) and the west side retains much of its original appearance. The newer, west side (facing Rock Creek) is also important in showing the attempt to maintain the detailing and design of the 1910 work while using the newer materials.

<sup>11</sup>U.S. Department of Interior. Reconstruction of Beach Drive from Pinehurst Stream to Wise Road. National Park Service, 1958, Sheet 7.

<sup>12</sup>Office of Engineer Commissioner, Washington, D.C. <u>Bridge on Beach</u> Driveway North of Military Road. 1910

<sup>13</sup>Tweed, William C., Laura E. Soulliere and Henry G. Law. <u>National Park Service Rustic Architecture: 1916-1942</u>. National Park Service Western Regional Office Division of Cultural Resource Management. February 1977.

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